REMARKS

The specification is amended to include the patent number of a referenced patent application, now a U.S. patent.

New drawings are included in response to the drawing objection.

The Office Action does not establish that claim 1 is unpatentable under 35 U.S.C. § 103(a) over Bizjak, US 2002/0103619A1 (hereinafter "Bizjak") in view of US patent number 5,519,389 to DeGunther et al. (hereinafter "DeGunther"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of Bizjak with teachings of DeGunther, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action does not show that all the limitations of claim 1 are suggested by the Bizjak-DeGunther combination. Claim 1 is a circuit for sampling a logic data signal and includes three timers, a first timer, a delay timer, and a second timer. The first timer is adapted to time a first time interval; the delay timer is adapted to time a delay time interval initiated from the start of the first time interval; and the second timer is adapted to time a second time interval initiated at the end of the delay time interval. The circuit also includes a coincidence circuit having an input terminal for receiving the logic data signal, an output terminal, and an enable terminal coupled to the second timer. The coincidence circuit is adapted to pass a sample of digital event pulses comprising the logic data signal from the input terminal to the output terminal during the second time interval.

DeGunther appears to only teach two timers, and there is no apparent need for a third timer as claimed. None of the cited teachings of DeGunther appears to suggest a third timer. Furthermore, DeGunther's discriminator output from the discriminator 20 (FIG. 2) does not appear to pass the sample of digital event pulses as claimed. The discriminator output appears to always be logic level 0 in DeGunther's FIGs. 3, 4, 6, 7, 8, and 9. Thus, the Office Action does not show that the Bizjak-DeGunther combination suggests all the limitations of claim 1.

The Office Action further fails to provide sufficient motivation for modifying Bizjak with DeGunther. The alleged motivation states, "it would have been obvious ... to modify Bizjak's patent with the teachings of DeGunther et al. by including an additional step of using [the limitations of claim 1 because] ... one of ordinary skill in the art would have recognized that it would provide the opportunity to define a fixed duration time interval during which digital signal can be sampled for analysis." It is respectfully submitted that there is no apparent benefit for Bizjak to be modified in this way, and the alleged motivation is conclusory. Bizjak already describes sampling (para. #310). Such sampling would seem to imply that Bizjak without the alleged modification implements some fixed duration time interval. It is not apparent how DeGunther would offer any improvement, and the Office Action does not provide any evidence of an improvement.

The alleged motivation is merely a broad conclusory statement of a teaching of DeGunther, and no evidence has been provided that suggests that any specific elements of DeGunther would be of any benefit to the Bizjak system. Specifically, the Office Action has not provided any evidence that Bizjak's system is lacking in functionality or has other deficiencies that would motivate a combination with DeGunther. Therefore, the alleged motivation is insufficient to support *prima facie* obviousness.

The rejection of claim 1 over the Bizjak-DeGunther combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action does not establish that claim 2 is unpatentable under 35 U.S.C. § 103(a) over Bizjak and DeGunther as applied to claim 1 and further in view of US patent number 4,519,090 to Stackhouse (hereinafter "Stackhouse"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther combination with teachings of Stackhouse, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action does not show that all the limitations of claim 2 are suggested by the Bizjak-DeGunther-Stackhouse combination. Claim 2 includes limitations of the first timer being a binary count register having N+1 bits, the delay timer being a latch register having N bits, and the binary count register and latch register being coupled to a comparator

circuit, and the comparator circuit being adapted to initiate the second timer when the value of the binary count register and the value of the latch register are equivalent. The cited teachings of Stackhouse do not suggest these limitations.

Stackhouse's counters do not suggest the limitations of the claimed count registers. If the sum of Stackhouse's up and down counters is not equal to the setting of the front panel switches, then at least one of the components has failed (col. 2, ll. 48). The limitations clearly set forth that the delay count register times a delay based on the first time interval controlled by the count register of the first timer. Stackhouse's count registers do not appear to be related as claimed. Furthermore, the Office Action does not cite any teaching of Stackhouse that suggests the initiation of the second timer based on the compared outputs of the first timer and delay timer, as claimed. Thus, the Office Action does not show that the Bizjak-DeGunther-Stackhouse combination suggests all the limitations of claim 2.

The alleged motivation for making the Bizjak-DeGunther-Stackhouse combination states that it "would have been obvious … because … it would provide the opportunity to delay the time interval to start sampling the digital signal for analysis." This alleged motivation is improper because it uses the function of the present invention as the motivation; the motivation is based solely on hindsight. The motivation must come from the prior art, not the invention. Therefore, the alleged motivation is improper.

The rejection of claim 2 over the Bizjak-DeGunther-Stackhouse combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action does not establish that claim 3 is unpatentable under 35 U.S.C. § 103(a) over Bizjak, DeGunther and Stackhouse as applied to claim 2 and further in view of US patent number 6,499,656 B1 to Marsh *et al.* (hereinafter "Marsh"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Stackhouse combination with teachings of Marsh, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 3 includes limitations of the delay timer pseudo-randomly varying the delay time interval. Marsh teaches pseudo-random delays used to trigger transmission of identification signals from multiple objects. There is no suggestion that the pseudo-random

delay is used to trigger any other timer (*i.e.*, the claimed second timer). Therefore, the Office Action fails to show that the Bizjak-DeGunther-Stackhouse-Marsh combination teaches the limitations of claim 3.

The alleged motivation for making the Bizjak-DeGunther-Stackhouse-Marsh combination is deficient for the same reasons set forth above in regards to claim 2. That is, the Office Action uses the teachings of the present invention as the reason to make the combination. Furthermore, the Office Action is apparently using the claims as a template to piece together various elements from the prior art, and is therefore, improperly based on hindsight. The number of references in the alleged combination, along with the different problems solved by the references, indicate that the alleged motivation is based on hindsight. Thus, the alleged motivation is improper.

The rejection of claim 3 over the Bizjak-DeGunther-Stackhouse-Marsh combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action does not establish that claim 4 is unpatentable under 35 U.S.C. § 103(a) over Bizak, DeGunther, Stackhouse and Marsh as applied to claim 3 and further in view of US patent number 4,320,962 to Takahashi *et al.* (hereinafter "Takahashi"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Stackhouse-Marsh combination with teachings of Takahashi, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 4 includes limitations of the delay timer being adapted to select the delay time interval from a finite set of discrete times. The Office Action alleges that Takahashi suggests these limitations. However, the cited teachings appear to merely suggest multiple pre-set delay times. There is no indication that these delay times are used in a pseudo-random fashion or even that the time values are pseudo-randomly generated. Thus, the Office Action has not shown that the Bizjak-DeGunther-Stackhouse-Marsh-Takahashi combination teaches the limitations of claim 4.

The alleged motivation for making the combination is improper for the same reasons set forth above for claim 3. That is, the alleged motivation is conclusory and based on hindsight.

The rejection of claim 4 over the Bizjak-DeGunther-Stackhouse-Marsh-Takahashi combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action does not establish that claim 5 is unpatentable under 35 USC § 103(a) over Bizjak, DeGunther, Stackhouse and Marsh as applied to claim 3 and further in view of US patent number 6,034,738 to Sparks. The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Stackhouse-Marsh combination with teachings of Sparks, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 5 includes limitations of the delay timer including a shift register. The Office Action alleges that Sparks' teaching of a shift register for a delay suggests the limitations of claim 5. However, the Office Action ignores the limitations of the shift register being coupled to both first and second timers. Thus, the Office Action fails to show that the Bizjak-DeGunther-Stackhouse-Marsh-Sparks combination suggests the limitations of claim 5.

The alleged motivation is improper as being conclusory and based on hindsight, and no evidence is provided to indicate that the DeGunther-Stackhouse-Marsh-Sparks combination could be made with a reasonable likelihood of success.

Claim 6 depends from claim 5, and *prima facie* obviousness is not established for at least the reasons set forth above.

The Office Action fails to establish that claims 7 and 8 are unpatentable under 35 U.S.C. § 103(a) over Bizak, DeGunther, Stackhouse, Marsh and Sparks as applied to claim 6 and further in view of US patent number 6,516,384 B1 to Clark *et al.* (hereinafter "Clark"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Stackhouse-Marsh-Sparks combination with teachings

of Clark, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 7 depends from claim 6 and includes limitations of the shift register being a round robin shift register. The Office Action cites Clark's round robin register 200. However, Clark's round robin register is used for cache replacement. There is no indication that the contents of Clark's round robin register are used in controlling a time interval as claimed. Therefore, the Office Action fails to establish that the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark combination suggests the limitations of claim 7.

The alleged motivation for making the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark combination is improper because it is conclusory and based on hindsight. Furthermore, modification of the Bizjak-DeGunther-Stackhouse-Marsh-Sparks combination with Clark's round robin cache replacement register would be unlikely to succeed.

Claim 8 includes limitations of the size of the register that implements the second timer relative to the size of the first timer. The cited section of DeGunther discusses a timer being set to a particular target frequency period. It is respectfully submitted that this teaching suggests a value, not the size of the register that holds the value. Furthermore, there is no suggestion of a size of a register being relative to that of another timer. Therefore, the Office Action fails to establish that the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark combination suggests the limitations of claim 8.

The Office Action fails to establish that claims 9 and 10 are unpatentable under 35 U.S.C. § 103(a) over Bizjak, DeGunther, Stackhouse, Marsh, Sparks and Clark as applied to claim 8 and further in view of US patent number 4,339,759 to Nakatsu (hereinafter "Nakatsu"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark combination with teachings of Nakatsu, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 9 includes limitations of the first timer being adapted to time a series of period time intervals. The Office Action cites a timer from Nakatsu's collector controller for a chromatograph as suggesting this limitation. It is respectfully submitted that nothing in the cited section of Nakatsu appears to suggest that Nakatsu's timer fires at periodic intervals. The cited section indicates that Nakatsu's timer fires at selected intervals with no apparent

mention of what "selected" entails. Thus, the Office Action fails to show that the limitations of claim 9 are suggested by the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark-Nakatsu combination.

The alleged motivation for making the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark-Nakatsu combination is improper because it is conclusory and based on hindsight as explained above for the other asserted combinations.

Claim 10 depends from claim 9 and includes further limitations of the delay timer being adapted to determine and time a new delay time interval for each first time interval in the series of first time intervals. The cited teaching of Nakatsu is inapplicable to these limitations because there is no apparent or cited teaching in Nakatsu of both the first timer and delay timer, with the delay timer being so adapted in conjunction with the first time interval from the first timer.

The rejection of claims 9 and 10 over the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark-Nakatsu combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish that claims 11 and 12 are unpatentable under 35 U.S.C. § 103(a) over the Bizjak-DeGunther-Stackhouse-Sparks-Clark-Nakatsu combination as applied to claim 10 and further in view of US patent number 3,882,492 to McSorley *et al.* (hereinafter "McSorley"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark-Nakatsu combination with teachings of McSorley, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 11 includes limitations of a counting circuit coupled to the coincidence circuit adapted to count the digital event pulses in the sample. The Office Action cites McSorley's col. 4, ll. 14-27. However, this section suggests a coincidence counter coupled to the output of a counter, not a counter coupled to the output of a coincidence circuit. The alleged motivation for making the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark-Nakatsu-McSorley combination is improper because it is conclusory and based on hindsight as explained above for the other asserted combinations. Furthermore, there is no apparent

evidence that McSorley's counter could be successfully combined into the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark-Nakatsu combination.

Claim 12 includes limitations of the counting circuit being reset responsive to the first timer. The cited section of McSorley does not suggest these limitations. McSorley's resetting of counters is at the end of print time, which is reasonably construed as being responsive to completion of printing, not in response to a timer (col. 2, ll. 64-67). Furthermore, there is no apparent motivation to combine a counter from an alarm signaling system with the myriad of other components from the other references; nor is there an apparent likelihood of successfully making the combination.

The rejection of claims 11 and 12 over the Bizjak-DeGunther-Stackhouse-Marsh-Sparks-Clark-Nakatsu-McSorley combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish that claim 13 is unpatentable under 35 U.S.C. § 103(a) over Bizjak in view of DeGunther and Marsh. The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of Bizjak with DeGunther and Marsh, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action does not show that all the limitations of claim 13 are suggested by the Bizjak-DeGunther-Marsh combination. Claim 13 is a circuit for sampling a plurality of digital event pulses and includes first and second timers, a sample window initiate circuit, and a sampler circuit. The first timer is adapted to time a plurality of base time intervals; the second timer is adapted to generate a sampling window signal for a sampling window time interval, the sampling window time interval being a shorter time than any of the base time intervals; the sample window initiate circuit is coupled to the first timer and adapted to start the second timer at a pseudo-random time within each of the plurality of base time intervals; and the sampler circuit is coupled to the second timer and arranged to receive the plurality of digital event pulses and to pass a sample of digital event pulses responsive to the sampling window signal.

As explained above, DeGunther appears to only teach two timers, and DeGunther has no apparent need for the claimed sample window initiate circuit and its functionality. None of the cited teachings of DeGunther appears to suggest the claimed sample window initiate circuit. Furthermore, DeGunther's discriminator output from the discriminator 20 (FIG. 2) does not appear to pass the sample of digital event pulses as does the claimed sampler circuit. The discriminator output appears to always be logic level 0 in DeGunther's FIGs. 3, 4, 6, 7, 8, and 9. Thus, the Office Action does not show that the Bizjak-DeGunther combination suggests all the limitations of claim 13.

The Office Action further fails to show a suggestion of the limitations of the pseudo-random time within each base time interval at which the second timer is started by the sample window initiate circuit. The Office Action cites Marsh. However, as explained above in regards to claim 3, Marsh teaches pseudo-random delays used to trigger transmission of identification signals from multiple objects. There is no suggestion that the pseudo-random delay is used to trigger any other timer (*i.e.*, the claimed second timer). Therefore, the Office Action fails to show that the Bizjak-DeGunther-Marsh combination teaches the limitations of claim 13. The alleged motivation for combining Marsh with Bizjak and DeGunther is deficient for at least the reasons set forth above for claim 3.

The rejection of claim 13 over the Bizjak-DeGunther-Marsh combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish that claims 14 and 15 are unpatentable under 35 U.S.C. § 103(a) over the Bizjak-DeGunther-Marsh combination as applied to claim 13 and further in view of McSorley. The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Marsh combination with McSorley, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 14 depends from claim 13 and includes further limitations of a counting circuit coupled to the sampler circuit and being adapted to accumulate a count of the sample of digital event pulses. As explained above in regards to claim 11, the Office Action does not establish that McSorley suggests the claimed counter. Furthermore, the alleged motivation

for making the combination is deficient for the reasons set forth above. Claim 15 depends from claim 14 and is patentable for at least the reasons set forth above.

The rejection of claims 14 and 15 over the Bizjak-DeGunther-Marsh-McSorley combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish that claim 16 is unpatentable under 35 U.S.C. § 103(a) over the Bizjak-DeGunther-Marsh-McSorley combination as applied to claim 14 and further in view of US patent number 3,801,834 to Lai (hereinafter "Lai). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Marsh-McSorley combination with Lai, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 16 includes limitations of the counting circuit including a capacitor coupled through a transistor to a constant current source, the transistor being responsive to each of the digital event pulses to pass a substantially fixed amount of charge from the constant current source to the capacitor. The operation of Lai's circuit clearly demonstrates that Lai does not suggest a capacitor coupled through a transistor to a constant current source being part of a counting circuit. Lai's capacitor 18 is either being charged positive or negative by a constant current source and is not coupled through a transistor to a constant current source (col. 3, ll. 7-24). Furthermore, Lai's capacitor is not shown as part of Lai's counter 54. Therefore, the Office Action fails to show that the Bizjak-DeGunther-Marsh-McSorley-Lai combination suggests all the limitations of claim 16.

The alleged motivation for making the Bizjak-DeGunther-Marsh-McSorley-Lai combination is conclusory and based on hindsight as are the other alleged motivations.

The rejection of claim 16 over the Bizjak-DeGunther-Marsh-McSorley-Lai combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish that claims 17 – 19 are unpatentable under 35 U.S.C. § 103(a) over the Bizjak-DeGunther-Marsh-McSorley combination as applied to claim 15 and further in view of US patent number 4,202,019 to Popoff *et al.* (hereinafter "Popoff"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Marsh-McSorley combination with Popoff, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 17 depends from claim 15 and includes further limitations of the first timer being a binary counter having N+1 bits, and the second timer being a binary counter having M+1 bits, M being less than or equal to N. These limitations are not suggested by the two cited pulse interval timers from Popoff as alleged by the Office Action. It is respectfully submitted that Popoff's pulse interval timers do not time a plurality of base time intervals and generate a signal for a sampling window time interval that is shorter than a base interval (as in claim 13) even though they may have the same number of bits as claimed. Thus, the claimed counters are not shown to be suggested by Popoff.

The alleged motivation for combining Popoff with the Bizjak-DeGunther-Marsh-McSorley combination is improper because it is conclusory and based on hindsight. Furthermore, the alleged motivation indicates one timer could "provide [a] longer time interval than the other timer." However, the cited section of Popoff indicates that both of the pulse interval timers are *n* bits. Thus, Popoff appears to teach equal intervals, and the alleged motivation is not supported by Popoff's teachings.

Claim 18 depends from claim 17 and is patentable over the Bizjak-DeGunther-Marsh-McSorley-Popoff combination for at least the reasons set forth above.

Claim 19 depends from claim 18 and includes further limitations of the sampling window initiate circuit including a pseudo-random number generator having K bits coupled to a shift register having N bits, the shift register being arranged to receive and shift binary pseudo-random numbers from the pseudo-random number generator to form N bit pseudo-random numbers. As explained above in regards to claim 13, Marsh does not suggest the limitations involving pseudo-randomly varying the second timer. Furthermore, no teaching of Marsh is cited to suggest the shift register receiving the pseudo-random numbers. Therefore, the Office Action fails to show that the Bizjak-DeGunther-Marsh-McSorley-Popoff combination teaches all the limitations of claim 19.

The rejection of claims 17, 18, and 19 over the Bizjak-DeGunther-Marsh-McSorley-Popoff combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish that claim 20 is unpatentable under 35 U.S.C. § 103(a) over the Bizjak-DeGunther-Marsh-McSorley-Popoff combination as applied to claim 19 and further in view of Clark. The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Marsh-McSorley- Popoff combination with Clark, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 20 includes limitations similar to those of claim 7. Thus, the Office Action does not show that the limitations of claim 20 are suggested by the Bizjak-DeGunther-Marsh-McSorley-Popoff-Clark combination for at least the reasons set forth above. The alleged motivation is conclusory and based on hindsight, and therefore, deficient as explained above.

The rejection of claim 20 over the Bizjak-DeGunther-Marsh-McSorley-Popoff-Clark combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish that Claim 21 is unpatentable under 35 U.S.C. § 103(a) over the Bizjak-DeGunther-Marsh-McSorley-Popoff-Clark combination as applied to claim 20 and further in view of US patent number 4,531,102 to Whitlock *et al.* (hereinafter "Whitlock"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of the Bizjak-DeGunther-Marsh-McSorley-Popoff-Clark combination with Whitlock, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 21 includes limitations of the overflow bit of the first timer being coupled to the counting circuit, and the counting circuit being adapted to reset responsive to the overflow

bit of the first timer. The cited teaching of Whitlock does not suggest a timer with an overflow bit that resets a counter. Rather, the cited teaching of Whitlock suggests a counter with an overflow bit, and the counter being reset in response to the state of the overflow bit. Therefore, the Office Action fails to show that the limitations of claim 21 are suggested by the Bizjak-DeGunther-Marsh-McSorley-Popoff-Clark-Whitlock combination.

The alleged motivation for combining Whitlock with the Bizjak-DeGunther-Marsh-McSorley-Popoff-Clark combination is improper because it is conclusory and based on hindsight. Furthermore, there is no apparent rationale for using a counter with an overflow bit from a digital phase lock loop system in the myriad system of the Bizjak-DeGunther-Marsh-McSorley-Popoff-Clark combination.

The rejection of claim 21 over the Bizjak-DeGunther-Marsh-McSorley-Popoff-Clark-Whitlock combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish that claims 22 and 26 are unpatentable under U.S.C. § 103(a) over Bizjak in view of DeGunther, Marsh and McSorley. The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for combining the teachings of Bizjak, DeGunther, Marsh, and McSorley, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 22 is a method for sampling a logic data signal. *Prima facie* obviousness is not established for claim 22 for at least the reasons set forth above in response to the rejection of claim 14 over the Bizjak-DeGunther-Marsh-McSorley combination.

Claim 26 is a circuit arrangement for sampling a logic data signal. To the extent that the limitations of claim 26 are similar to those of claim 22, claim 26 is patentable over the Bizjak-DeGunther-Marsh-McSorley combination for at least the reasons set forth above.

The Office Action fails to establish that Claim 23 is unpatentable under 35 U.S.C. § 103(a) over the Bizjak-DeGunther-Marsh-McSorley combination as applied to claim 22 and further in view of Popoff. The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper

motivation for combining the teachings of Bizjak, DeGunther, Marsh, McSorley, and Popoff, and fails to show that the combination could be made with a reasonable likelihood of success.

Claim 23 depends from claim 22, and *prima facie* obviousness is not established for at least the reasons set forth above in response to the rejection of claims 22 and also for the reasons set forth above in response to the rejection of claims 17-19.

The Office Action fails to establish that claims 24 – 25 are unpatentable under 35 U.S.C. § 103(a) over the Bizjak-DeGunther-Marsh-McSorley-Popoff combination as applied to claim 23 and further in view of Clark. The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for combining the teachings of Bizjak, DeGunther, Marsh, McSorley, Popoff, and Clark and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to establish a *prima facie* case of obviousness of claims 24-25 for at least the reasons set forth above for claim 7, as well as the reasons set forth above for claim 20.

Withdrawal of the rejections and reconsideration of the claims are respectfully requested. If the examiner has any questions or concerns, a telephone call to the undersigned is welcome.

No extension of time is believed to be necessary for consideration of this response. However, if an extension of time is required, please consider this a petition for a sufficient number of months for consideration of this response. If there are any additional fees in connection with this response, please charge Deposit Account No. 50-0996 (HPCO.077PA).

Respectfully submitted,

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